Monitoring Data Record

Project Title: R-2210A Site 1 (Waynesville Site 1) COE Action ID: 200130653
Stream Name: Raccoon Creek DWQ Number: 010409
City, County and other Location Information: Sta. 30 on Bus. 23 S in Waynesville, Haywood Co.
Date Construction Completed: July 2003 (lower portion) Monitoring Year: (2) of 5
Ecoregion: 8 digit HUC unit 06010106
USGS Quad Name and Coordinates:
Rosgen Classification:
Length of Project: 1225' Urban or Rural: Rural Watershed Size:
Monitoring DATA collected by: M. Green, J. Wait, D. Jenkins Date: 5/31/05
Applicant Information:
Name: NCDOT Roadside Environmental Unit
Address: 1425 Rock Quarry Rd. Raleigh, NC 27610
Telephone Number: (919) 861-3772 Email address: mlgreen@dot.state.nc.us
Consultant Information:
Name:
Address:
Telephone Number: Email address:
Project Status: Upper portion of project is still under construction.
Some additional planting needs to take place in this area.

Monitoring Level required by COE and DWQ (404 permit/ 401 Cert.): Level (**1**) ~~2~~ ~~3~~
Monitoring Level 1 requires completion of *Section 1, Section 2 and Section 3*
Permit States: NCDOT shall perform the following components of Level I monitoring twice each year for the 5 year monitoring period (summer and winter): Reference photos, plant survival, and visual inspection of channel stability. If less than two bankfull events occur during the first 5 years, NCDOT shall continue monitoring until the second bankfull event is documented. The bankfull events must occur during separate monitoring years. In the event that the required bankfull events do not occur during the 5 year monitoring period, the USACE, in consultation with resource agencies, may determine that further monitoring is not required.

Section 1. PHOTO REFERENCE SITES
(Monitoring at all levels must complete this section)

Attach site map showing the location and angle of all reference photos with a site designation (name, number, letter, etc.) assigned to each reference photo location. Photos should be provided for all structures and cross section locations, should show both banks and include an upstream and downstream view. Photos taken to document physical stability should be taken in winter. Photos taken to document vegetation should be taken in summer (at representative locations). Attach photos and a description of each reference photo or location. We recommend the use of a photo identification board in each photo to identify location.

Total number of reference photo locations at this site: 6 reference points, 2 photos at each
Dates reference photos have been taken at this site: 5/20/04, 11/1/04, 5/31/05

Individual from whom additional photos can be obtained (name, address, phone):

Other Information relative to site photo reference:

If required to complete Level 3 monitoring only stop here; otherwise, complete section 2.

Section 2. PLANT SURVIVAL
Attach plan sheet indicating reference photos.

Identify specific problem areas (missing, stressed, damaged or dead plantings):
The upper portion of the stream is still under construction and needs some additional plantings to take place. Permanent photo stations (photos 9, 10, 11, and 12) were installed on the upper portion of the stream and recorded this monitoring period.

Estimated causes, and proposed/required remedial action: The upper portion of the stream will be planted in 2006.

ADDITIONAL COMMENTS: Stream is highly vegetated with various grasses, clover, cattail and *Juncus* sp. Trees are doing well and include yellow poplar, white oak, river birch, white pine, elderberry, dogwood, sycamore, and maple.

If required to complete Level 1 and Level 2 monitoring only stop here; otherwise, complete section 3.

Section 3. CHANNEL STABILITY

Visual Inspection: The entire stream project as well as each in-stream structure and bank stabilization/revetment structure must be evaluated and problems addressed.

Report on the visual inspection of channel stability. Physical measurements of channel stability/morphology will not be required. Include a discussion of any deviations from as-built and an evaluation of the significance of these deviations and whether they are indicative of a stabilizing or destabilizing situation.

The stream is stable and is doing well. Water is cutting behind a rootwad, which is noted in photo 5. The streambank is stabilized at this area by vegetation and is not a problem at this time.

Date Inspected	Station Number	Station Number	Station Number	Station Number	Station Number
Structure Type					
Is water piping through or around structure?					
Head cut or down cut present?					
Bank or scour erosion present?					
Other problems noted?					

NOTE: Attach separate narrative sheets to each monitoring report describing/discussing the overall monitoring results. Include the identification of specific problem areas/channel failures, estimated cause and proposed/required remedial action. This should include a brief discussion of any parameter that has changed significantly from as-built.

Waynesville Site 1

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

Year 2 – May 2005

Waynesville Site 1

Photo 7

Photo 8

Photo 9

Photo 10

Photo 11

Photo 12

Year 2 – May 2005